FIG. 1

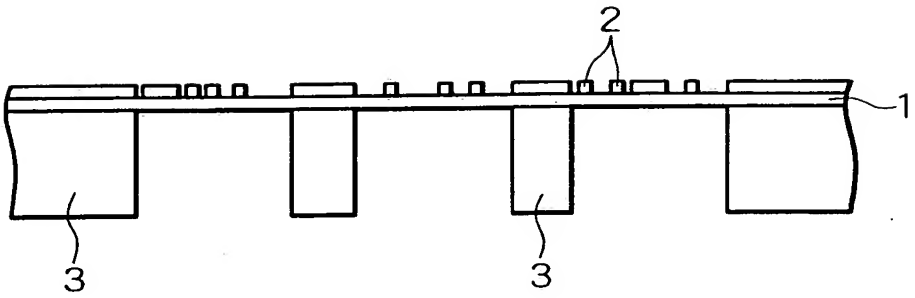


FIG. 2

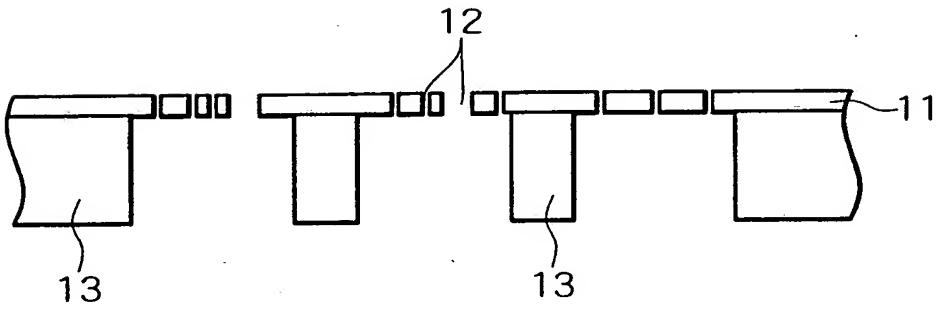


FIG. 3

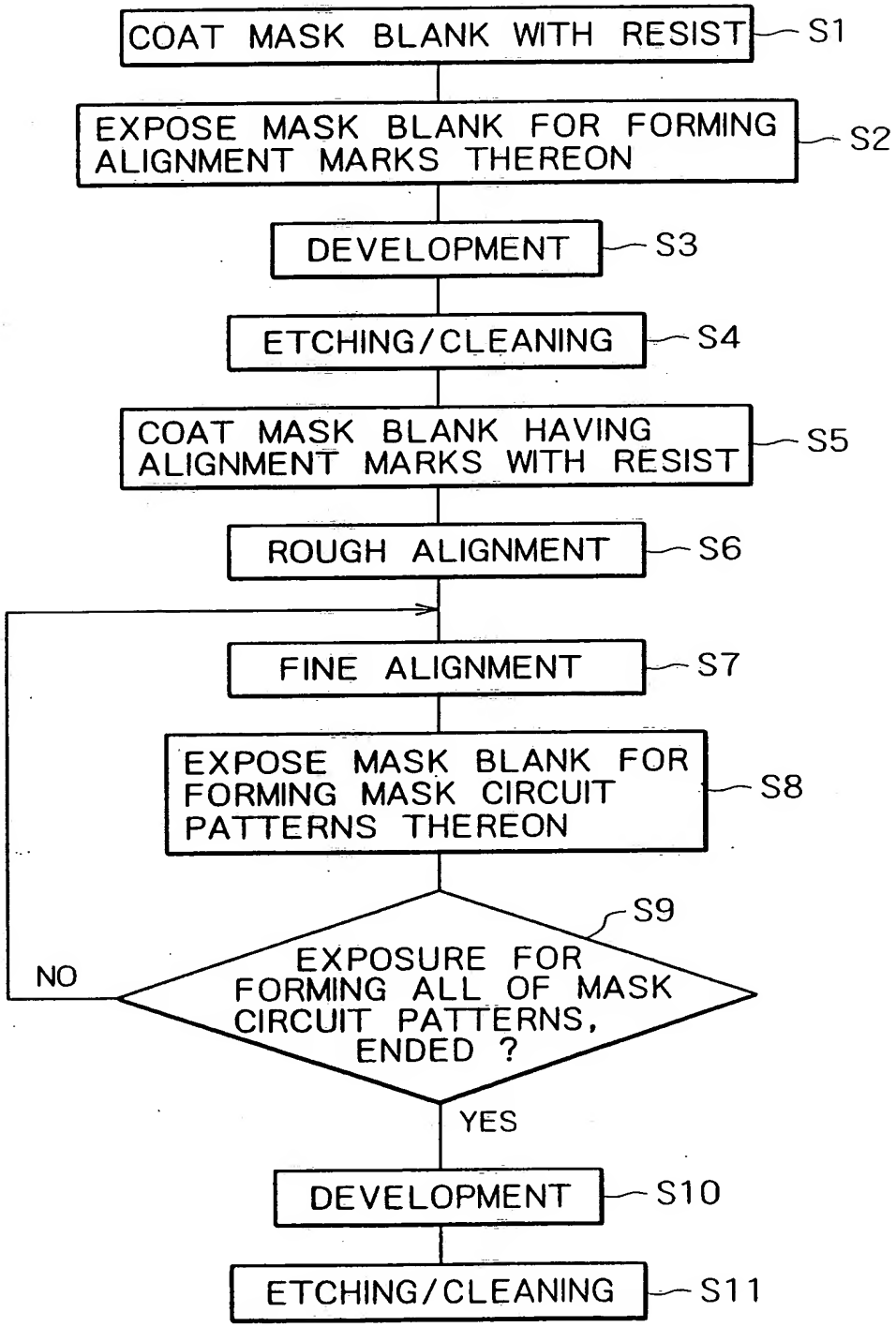

COAT MASK BLANK WITH RESIST
S1
EXPOSE MASK BLANK FOR FORMING ALIGNMENT MARKS THEREON
S2
DEVELOPMENT
S3
ETCHING/CLEANING
S4
COAT MASK BLANK HAVING ALIGNMENT MARKS WITH RESIST
S5
ROUGH ALIGNMENT
S6
FINE ALIGNMENT
S7
EXPOSE MASK BLANK FOR FORMING MASK CIRCUIT PATTERNS THEREON
S8
S9
EXPOSURE FOR FORMING ALL OF MASK CIRCUIT PATTERNS, ENDED ?
NO
YES
DEVELOPMENT
S10
ETCHING/CLEANING
S11

FIG. 4A

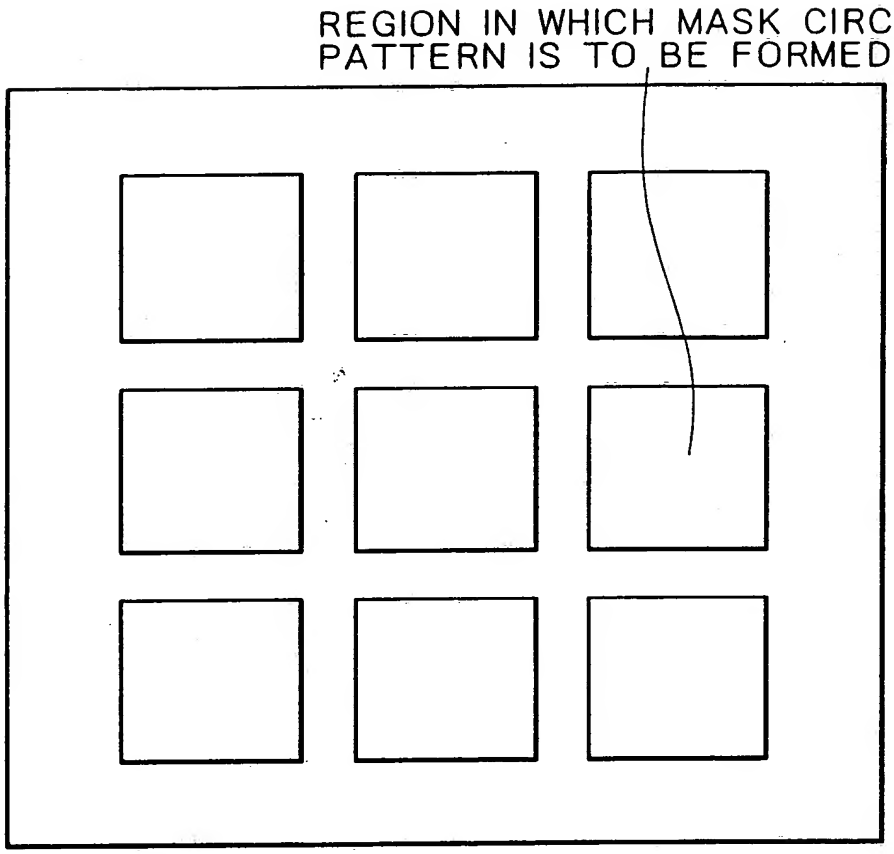


FIG. 4B

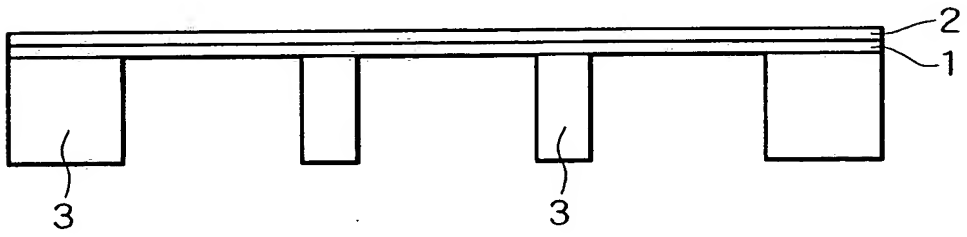


FIG. 4C

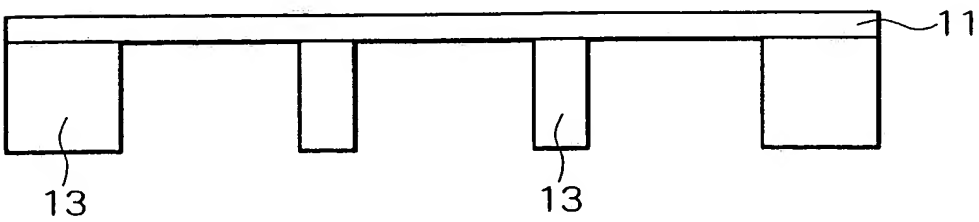


FIG. 5A

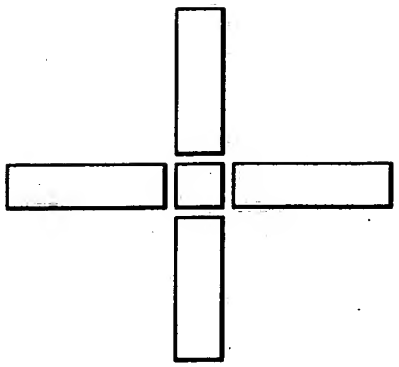


FIG. 5B

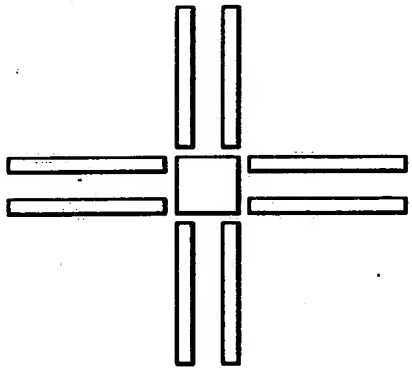


FIG. 5C

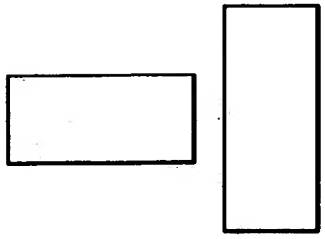


FIG.6

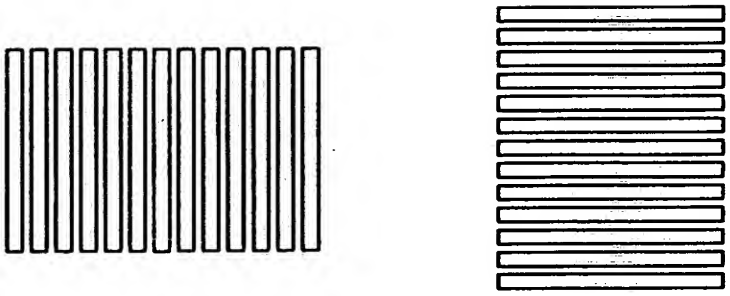


FIG. 7A

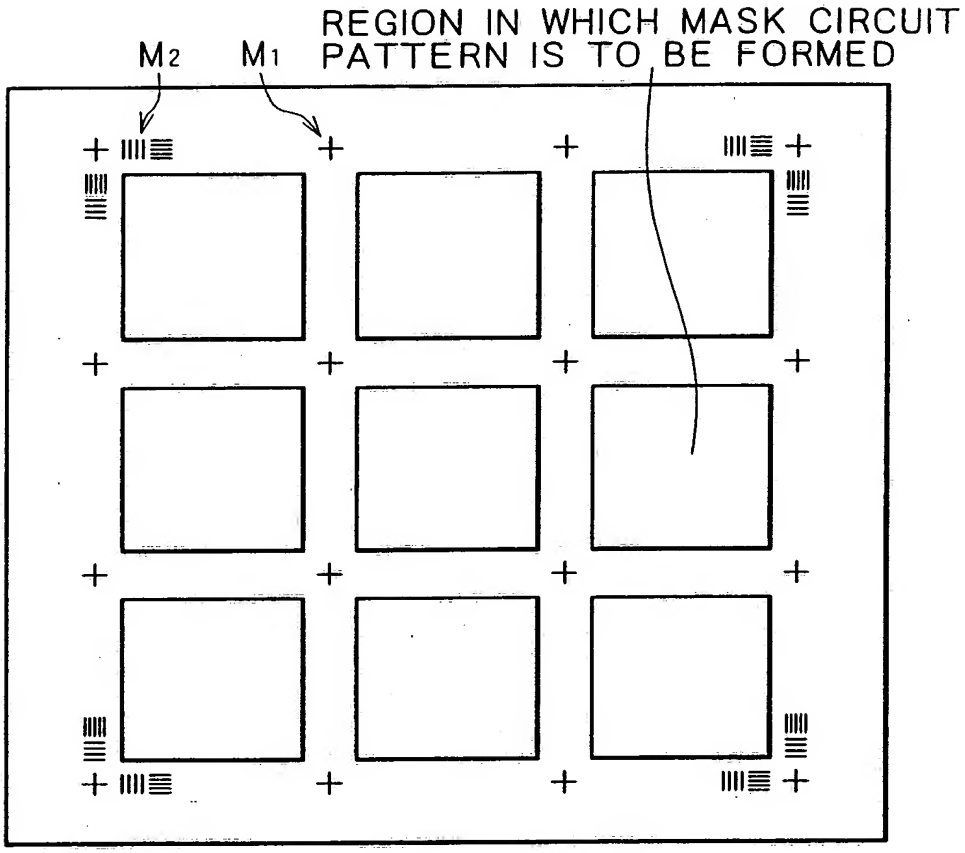


FIG. 7B

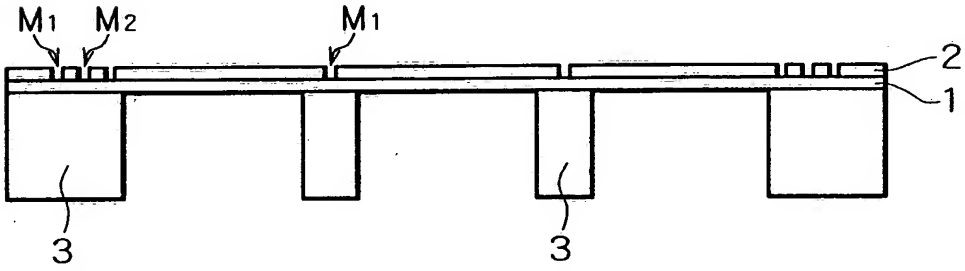


FIG. 7C

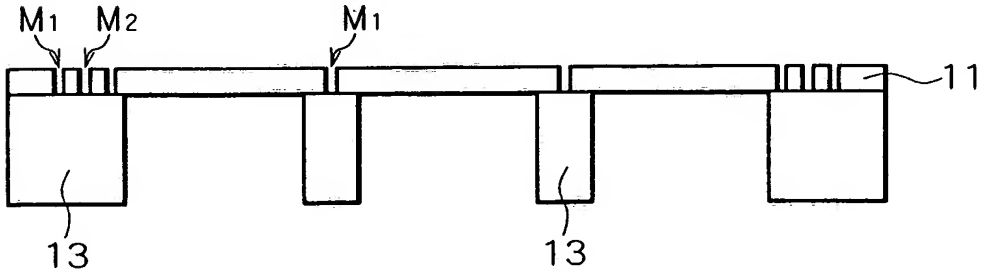


FIG. 8

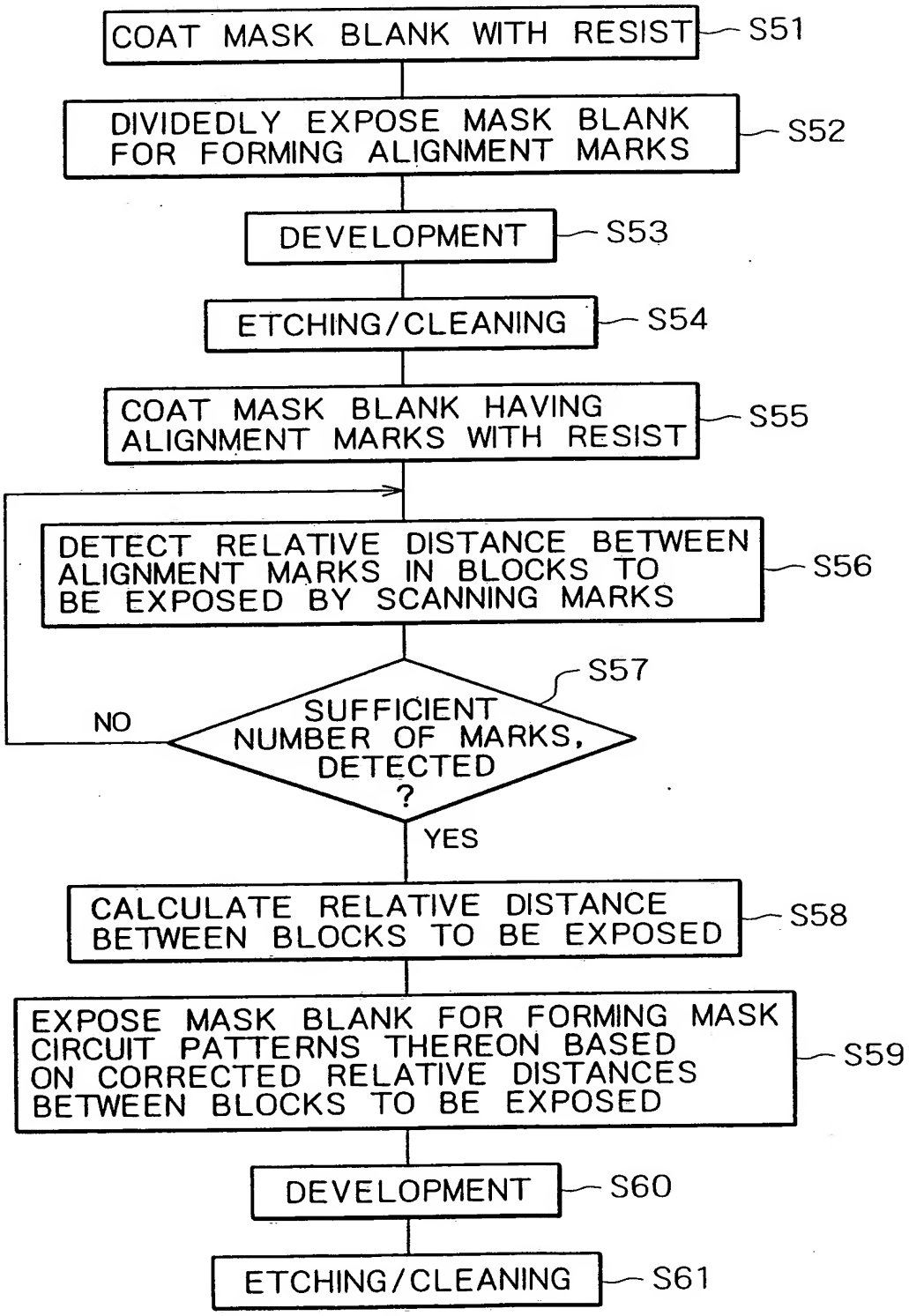

COAT MASK BLANK WITH RESIST
S51
DIVIDEDLY EXPOSE MASK BLANK FOR FORMING ALIGNMENT MARKS
S52
DEVELOPMENT
S53
ETCHING/CLEANING
S54
COAT MASK BLANK HAVING ALIGNMENT MARKS WITH RESIST
S55
DETECT RELATIVE DISTANCE BETWEEN ALIGNMENT MARKS IN BLOCKS TO BE EXPOSED BY SCANNING MARKS
S56
S57
SUFFICIENT NUMBER OF MARKS, DETECTED ?
NO
YES
CALCULATE RELATIVE DISTANCE BETWEEN BLOCKS TO BE EXPOSED
S58
EXPOSE MASK BLANK FOR FORMING MASK CIRCUIT PATTERNS THEREON BASED ON CORRECTED RELATIVE DISTANCES BETWEEN BLOCKS TO BE EXPOSED
S59
DEVELOPMENT
S60
ETCHING/CLEANING
S61

FIG. 9

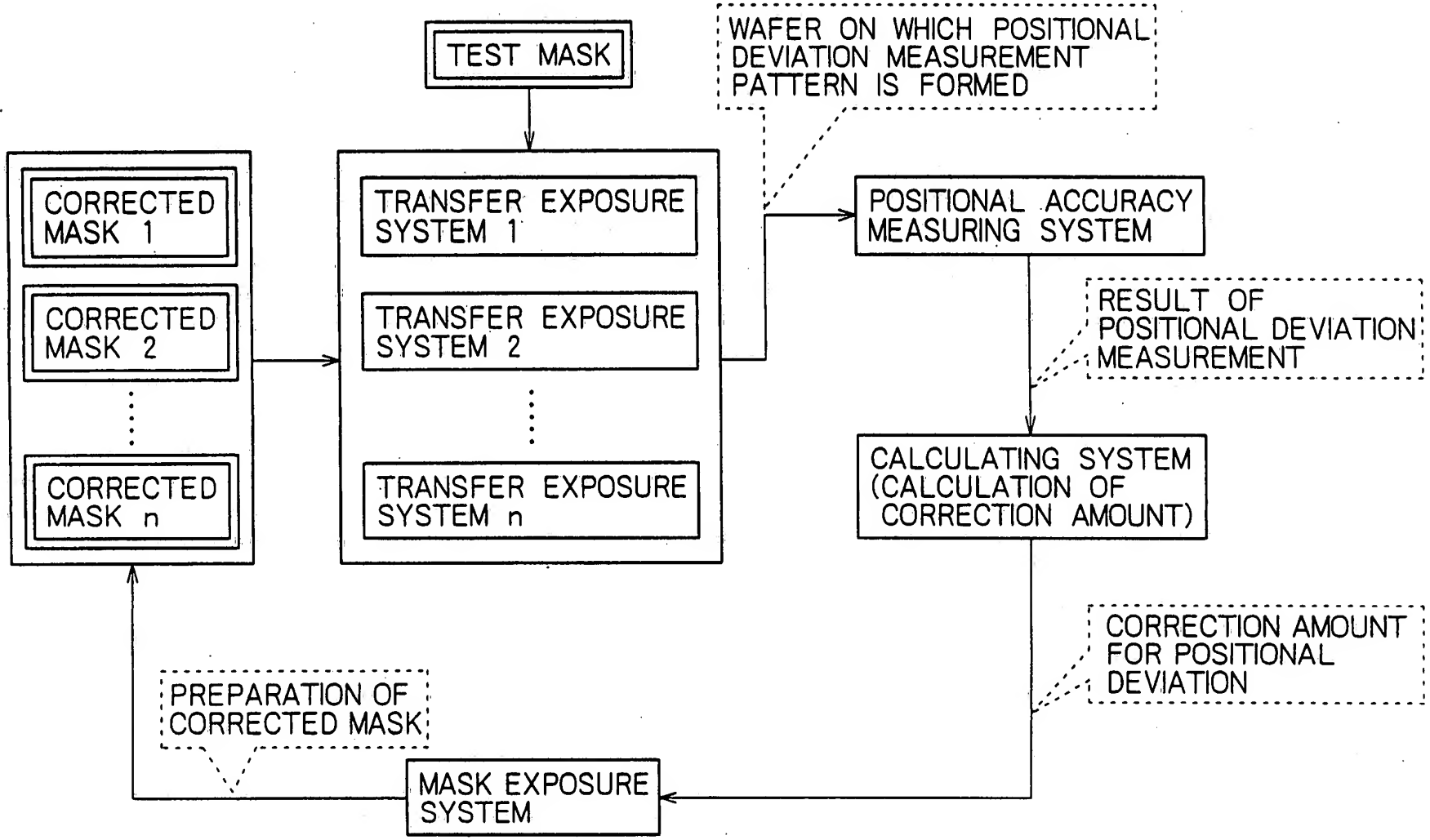

TEST MASK
WAFER ON WHICH POSITIONAL DEVIATION MEASUREMENT PATTERN IS FORMED
CORRECTED MASK 1
CORRECTED MASK 2
CORRECTED MASK n
TRANSFER EXPOSURE SYSTEM 1
TRANSFER EXPOSURE SYSTEM 2
TRANSFER EXPOSURE SYSTEM n
POSITIONAL ACCURACY MEASURING SYSTEM
RESULT OF POSITIONAL DEVIATION MEASUREMENT
CALCULATING SYSTEM (CALCULATION OF CORRECTION AMOUNT)
CORRECTION AMOUNT FOR POSITIONAL DEVIATION
PREPARATION OF CORRECTED MASK
MASK EXPOSURE SYSTEM

FIG. 10

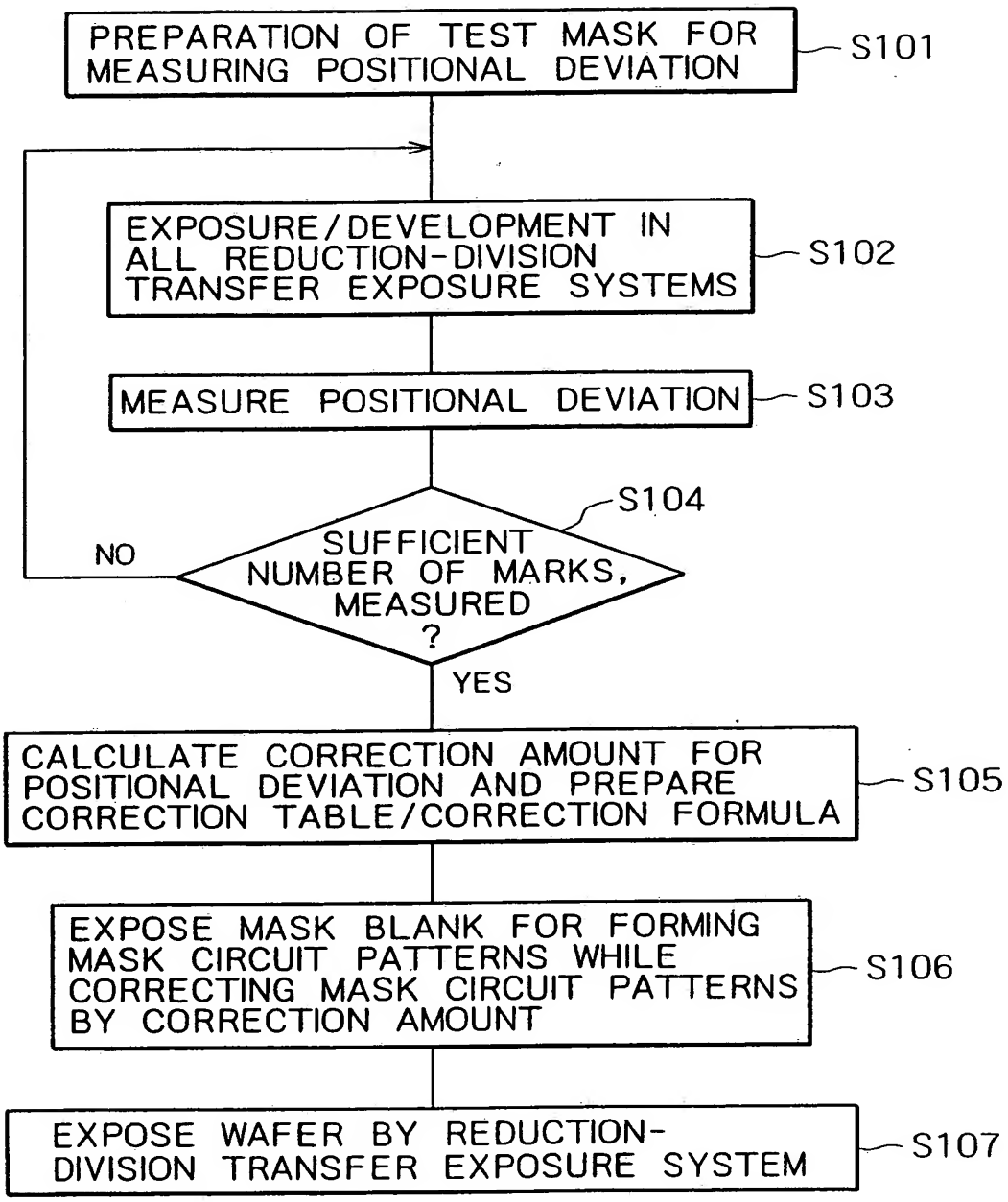

PREPARATION OF TEST MASK FOR MEASURING POSITIONAL DEVIATION
S101
EXPOSURE/DEVELOPMENT IN ALL REDUCTION-DIVISION TRANSFER EXPOSURE SYSTEMS
S102
MEASURE POSITIONAL DEVIATION
S103
S104
SUFFICIENT NUMBER OF MARKS, MEASURED ?
NO
YES
CALCULATE CORRECTION AMOUNT FOR POSITIONAL DEVIATION AND PREPARE CORRECTION TABLE/CORRECTION FORMULA
S105
EXPOSE MASK BLANK FOR FORMING MASK CIRCUIT PATTERNS WHILE CORRECTING MASK CIRCUIT PATTERNS BY CORRECTION AMOUNT
S106
EXPOSE WAFER BY REDUCTION-DIVISION TRANSFER EXPOSURE SYSTEM
S107

FIG. 11

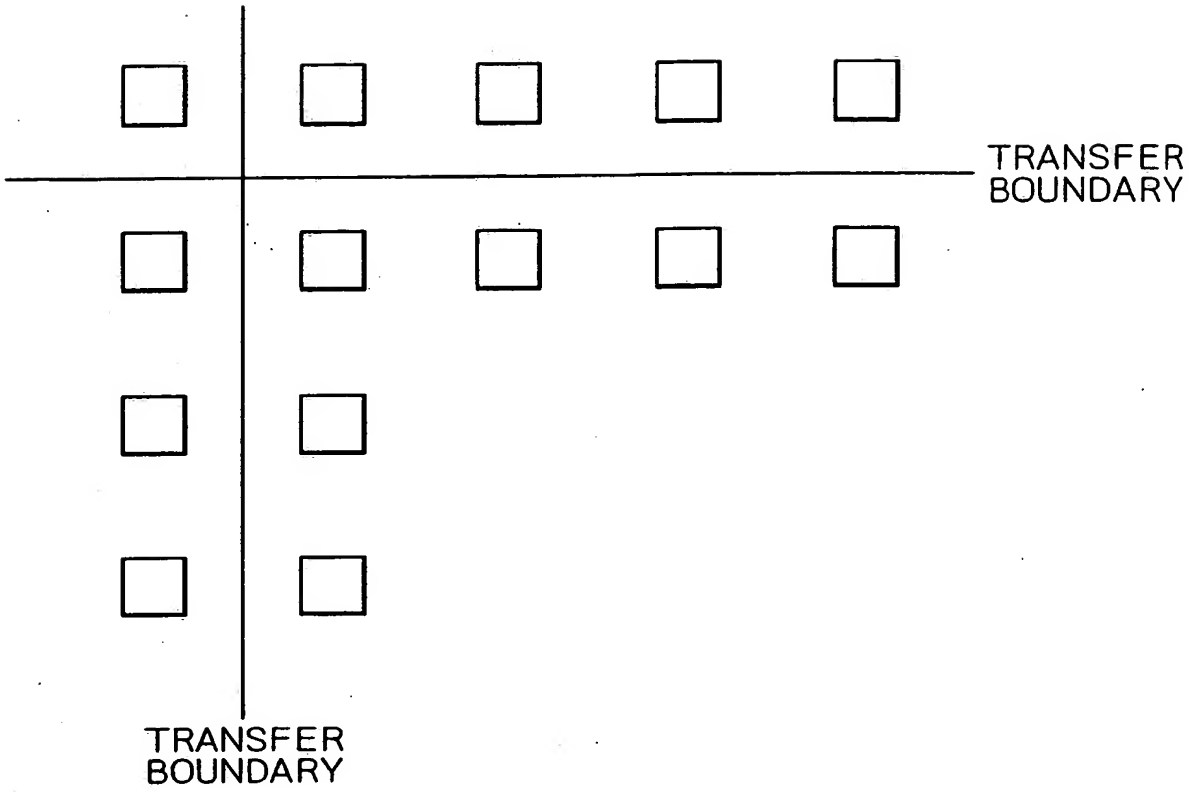

TRANSFER
BOUNDARY
TRANSFER
BOUNDARY

FIG. 12

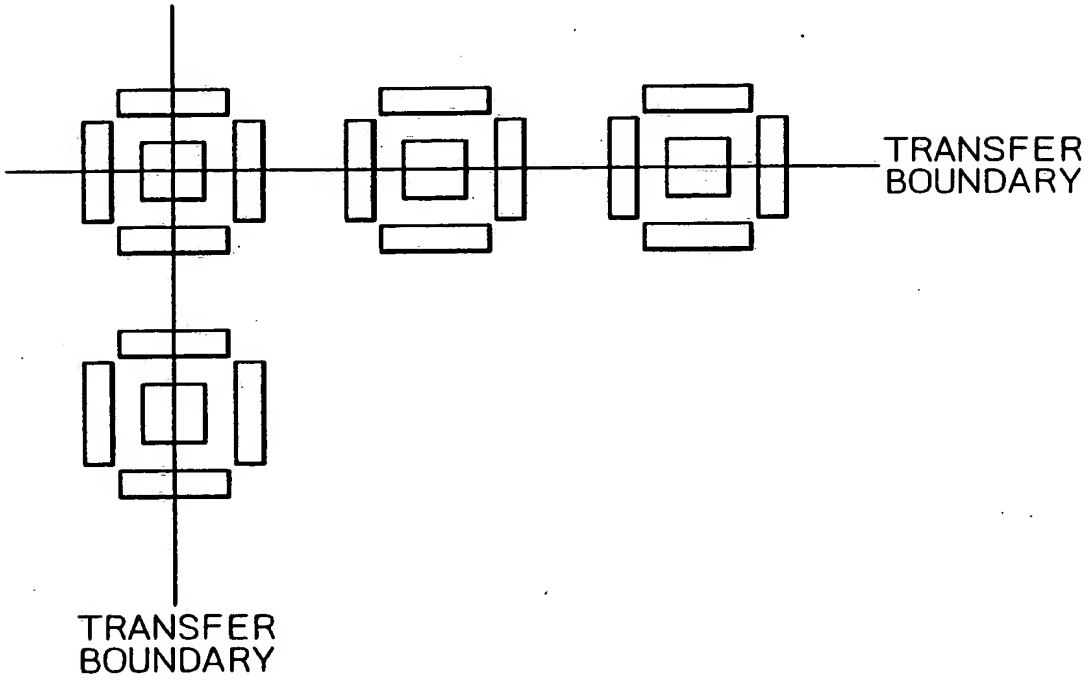
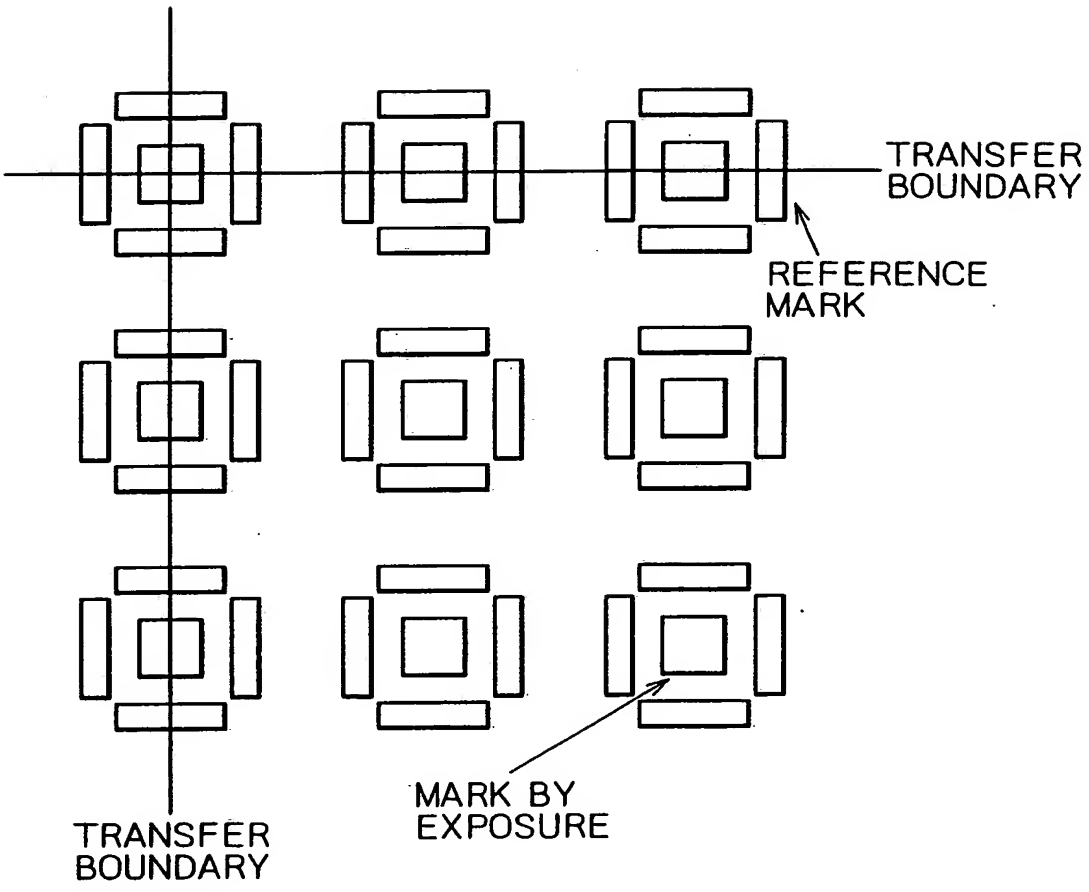

TRANSFER
BOUNDARY
TRANSFER
BOUNDARY

FIG. 13


TRANSFER BOUNDARY
REFERENCE MARK
MARK BY EXPOSURE
TRANSFER BOUNDARY